

REMARKS

Status of the Application

Claims 1 through 121 are pending in this application. Claims 7 through 20, 30 through 61, 76 through 89 and 119-121 have been withdrawn. Claims 1, 62, 90, and 105 have been amended. No new matter has been added.

Claims 1 through 6, 21 through 29, 62 through 75, and 90 through 118 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Number 6,105,065 (Rao et al.) in view of what would be obvious to one of ordinary skill in the art.

Rejections Under 35 U.S.C. § 103

Applicants have noted that “conventional network management system are limited in that the focus is often on managing and controlling physical elements (e.g., nodes connected to the management server), rather than the more abstract concepts of interest to users and site administrators (e.g., the health of services, applications).” (Substitute Specification, p. 2, ll. 19-20.) Applicants have addressed this limitation in the art and have disclosed

a network management system and method performed at a network site that includes a manager engine computer capable of monitoring, storing and acting upon, network state information. The network state information is organized as a series of relationships among managed network elements. **The managed network elements may include physical nodes connected to the manager engine, applications, subroutines, services, required data or any other element located or performed on the network, whether physical or logical in nature.** The managed network elements assume one of a set of predefined states, thus indicating an error or the potential for failure arising from a managed element.

(Substitute Specification, p. 3, ll. 10-18). “Because the basic monitored unit (managed element) may be a logical or software component as well as a physical component, *the system can provide more detailed, intelligent information relating to failure events or potential failure events.*” (Substitute Specification, p. 5, ll. 1-4).

Claim 1 as amended is directed to a computer network including a plurality of managed sites, wherein each of the managed sites comprises:

a. at least one manager engine computer coupled to a plurality of managed nodes, the at least one manager engine computer including a management software component, the management software component being capable of retrieving and storing data representative of network system state information, the network system state information comprising relationships among a plurality of managed network elements, wherein at least one of the plurality of managed network elements corresponds to one of the plurality of managed nodes, **and wherein the plurality of managed network elements comprise at least one physical element and at least one of a software application, and a software subroutine;** and

b. at least one client computer coupled to the at least one manager engine computer, the at least one client computer including a data retrieval software component, the data retrieval software component being capable of retrieving the data representative of network system state information from the at least one manager engine computer and of presenting the data representative of network system state information to a user.

Claim 90 as amended is directed to a method for managing such a computer network.

Claim 62 as amended is directed to a manager engine computer comprising:

a. a management software component, the management software component being capable of retrieving, analyzing and storing the data representative of network state information organized as a series of relationships among managed elements of the network, and

b. a client interface software component, the client interface software component facilitating retrieval from the manager engine computer by the client of the stored data representative of network state information organized as a series of relationships among managed elements of the network,

wherein the plurality of managed elements comprise at least one physical element and at least one of a software application, and a software subroutine.

Claim 105 as amended is directed to a method of managing such a computer network.

Thus, in order for a reference or set of reference to render claims 1, 62, 90, and 105 obvious, the references must teach all of the claimed elements and suggest combining the references in the claimed arrangement. In particular, the reference must teach combining the

references to arrive at the claimed combinations including the limitation that **the plurality of managed elements comprise at least one physical element and at least one of a software application, and a software subroutine.** Applicants' undersigned representative respectfully submits that the cited references neither teach nor suggest the claimed combination.

Rao et al. Do Not Render the Claims Obvious

Rao et al. noted that the "difficulty in representing the state of, and traffic traversing, a network is particularly prominent in connection-oriented networks, such as ATM networks, as a complex arrangement of calls may exist at any particular moment between the various nodes that comprised the network. Particularly in large networks, which may include hundreds or even thousands of routers and switches, the representation of network information in an easily discernible manner can prove difficult." (Col. 1, ll. 41-49). Accordingly, Rao et al. allege to disclose a method of displaying changes in call status between nodes within a connection-oriented network. In particular, in connection with Figures 7 and 8, Rao et al. disclose a "Physical View 100" and a "call View 120" of a connection-oriented network. The disclosed "Physical View 100" displays "icons **representative of physical devices (e.g. routers, bridges, switches, hubs, end stations) within an exemplary network.**" (Col. 11, 58-61). "[E]ach icon in the physical view 100 includes a symbol representative of the device type, and an Internet Protocol (IP) address of that device's agent." A user can transform the Physical View 100 into a Call View 120 by selecting icons on the Physical View 100. "In the exemplary Call View 120, the icon 122 represents a node hosted on the network device 110, and **the lines shown fanning out from the icon 122 represent calls for which the relevant node is an end point.**" (Col. 12, ll. 9-12).

Thus, Rao et al. disclose systems and methods for displaying calls in a connection-oriented network. The disclosed systems and methods employ a user interface that represent physical devices such as routers, bridges, switches, hubs, and end stations, and calls between the physical devices. In contradistinction, Applicants sought to provide an interface for providing information *beyond the physical elements in a network and including logical elements*. In the claimed systems and methods, the managed elements **comprise at least one**

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physical element *and at least one of a software application, and a software subroutine.*


Rao et al. simply do not teach, nor do they suggest systems and methods wherein managed elements include software applications, and software subroutines. The lines shown fanning out between the physical nodes of Rao et al. in Figures 7 and 8 represent calls made between nodes. A call is not a software application nor is it a software subroutine. Accordingly, Rao et al. cannot possibly render the claimed systems and methods obvious.

Therefore, because Rao et al. do not teach or even suggest all of the claimed elements, it is not possible that Rao et al. could teach the claimed combination. Withdrawal of the rejections is respectfully requested. Furthermore, if the Examiner maintains the rejection, Applicants' undersigned representative respectfully requests that the Examiner quote the specific language in Rao et al. or other references that allegedly teach the limitation that the plurality of managed elements comprise at least one physical element and at least one of a software application, and a software subroutine, and the specific language in Rao et al. that allegedly suggests combining those claim elements in the claimed combination.

CONCLUSION

Applicants' undersigned representative respectfully requests reconsideration of the claims and early issuance of a Notice of Allowance.

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